# STATEMENT OF BASIS

as required by LAC 33:IX.2411, for draft Louisiana Pollutant Discharge Elimination System Permit No. LA0124851; AI167102; PER20090001 to discharge to waters of the State of Louisiana as per LAC 33:IX.2311.

The permitting authority for the Louisiana Pollutant Discharge Elimination System (LPDES) is:

Louisiana Department of Environmental Quality Office of Environmental Services P. O. Box 4313 Baton Rouge, Louisiana 70821-4313

I. THE APPLICANT IS: Town of Livonia

Livonia Wastewater Treatment Facility

P.O. Box 307 Livonia, LA 70755

II. PREPARED BY:

Darlene Bernard

DATE PREPARED: November 17, 2009

III. PERMIT ACTION: Initial issuance LPDES permit LA0124851, AI167102

LPDES application received: September 28, 2009

#### IV. **FACILITY INFORMATION:**

- The application is for the discharge of treated sanitary wastewater from a A. proposed publicly owned treatment works serving the Town of Livonia.
- The permit application does not indicate the receipt of industrial wastewater. В.
- The facility is located at the dead end of Bayou Road, in Livonia, Point Coupee C. Parish.
- The treatment facility consists of an Extended Aeration Activated Sludge D. Mechanical Wastewater Treatment Plant with Tertiary Filter. Disinfection is by chlorination.

#### E. Outfall 001

Discharge Location:

Latitude 30°33'52" North

Longitude 91°33'16.5" West

Description:

treated sanitary wastewater

Design Capacity:

0.155 MGD

Type of Flow Measurement which the facility is currently using:

V-notch Weir with combination Totalizing Meter/Continuous Recorder

## V. <u>RECEIVING WATERS:</u>

The discharge is into Bayou Grosse Tete, thence into the Intracoastal Canal in segment 120104 of the Terrebonne Basin. Segment 120104 of the Terrebonne Basin is listed on the 303(d) list of impaired water bodies.

The designated uses and degree of support for Segment 120104 of the Terrebonne Basin are as indicated in the table below<sup>1/2</sup>:

Overall Degree of Support for Segment 120104 Partial	Degree of Support of Each Use								
	Primary Contact Recreation	Secondary Contact Recreation	Propagation of Fish & Wildlife	Outstanding Natural Resource Water	Drinking Water Supply	Shell fish Propagation	Agriculture		
	Not Supporting	Full	Not Supporting	N/A	N/A	N/A	N/A		

 $<sup>^{1/2}</sup>$ The designated uses and degree of support for Segment 120104 of the Terrebonne Basin are as indicated in LAC 33:IX.1123.C.3, Table (3) and the 2006 Water Quality Management Plan, Volume 5, Part B, Water Quality Inventory respectively.

#### VI. ENDANGERED SPECIES:

The receiving waterbody, Subsegment 120104 of the Terrebonne Basin is not listed in Section II.2 of the Implementation Strategy as requiring consultation with the U. S. Fish and Wildlife Service (FWS). This strategy was submitted with a letter dated November 17, 2008 from Rieck to Nolan (LDEQ). Therefore, in accordance with the Memorandum of Understanding between the LDEQ and the FWS, no further informal (Section 7, Endangered Species Act) consultation is required. It was determined that the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat.

# VII. <u>HISTORIC SITES:</u>

The discharge is from a proposed location. In accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" consultation with the Louisiana State Historic Preservation Officer is required. A letter was sent to the State Historic Preservation Officer on September 30, 2009.

# VIII. <u>PUBLIC NOTICE</u>:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

The public notice is published in a local paper of general circulation and the Office of Environmental Services Public Notice Mailing List.

For additional information contact:

Darlene Bernard
Permits Division
Department of Environmental Quality
Office of Environmental Services
PO Box 4313
Baton Rouge, LA 70821-4313

# IX. <u>PROPOSED PERMIT LIMITS:</u>

Subsegment 120104 of the Terrebonne Basin is listed on the 2006 303(d) list as impaired for Nutrients (Nitrate + Nitrite as N), Organic enrichment/low DO, Phosphorus, Pathogen indicators and TDS. There are two TMDLs that were finalized for selected Subsegments in the Upper Terrebonne Basin. Applicable TMDLs are summarized below. A reopener clause will be established in the permit to allow for the requirement of more stringent effluent limitations and requirements as required.

EPA TMDL for Fecal Coliform Bacteria, Chlorides, Sulfates, Total Dissolved Solids, Turbidity, and Total Suspended Solids in the Terrebonne Basin, LA

Bayou Grosse Tete, Segment 120104 is impaired for Total Dissolved Solids (TDS) and Fecal Coliform bacteria. No domestic wastewater facilities with permit limits for chloride, sulfate, or TDS were found in the Terrebonne Basin, although it is possible that the discharges from such facilities could have slightly elevated levels of these parameters. Therefore, these facilities were given WLAs using facility flow and water quality criteria. As long as point source discharges of treated wastewater contain parameter levels at or below these permit

source discharges of treated wastewater contain parameter levels at or below these permit limits, they should not be a cause of exceedances of water quality criteria. Therefore, permit limits for TDS equivalent to criteria for Segment 120104 found at LAC 33:IX.1123.Table 3 have been placed in the permit. Although the TMDL addressed chloride, sulfate, turbidity, sediment, and TSS, these pollutants were not causes of impairment for Segment 120104. Since these pollutants were not causes of impairments nor were they attributed to sanitary discharges, they were not limited in the permit. It should be noted that total suspended solids (TSS) can be discharged from sanitary treatment plants. However, they were not determined to be a source in this TMDL. Nonetheless, TSS is limited in the permit based on other permits from similar facilities.

In addition, Bayou Grosse Tete has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.b.i, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Limits consistent with this standard have also been placed in the permit.

# Bayou Grosse Tete TMDL for Biochemical Oxygen Demanding Substances and Nutrients

Bayou Grosse Tete (Subsegment 120104) is listed as impaired for organic enrichment/low DO and Nutrients. The TMDL established load limitations for oxygen-demanding substances and goals for reduction of those pollutants. Thirteen permitted facilities were addressed in the TMDL. Seven of these discharges were either too small or too far away to have an impact and are accounted for as nonpoint loading through the calibration process. (They will fall under one of several state regional permitting policies that determine permit limitations.) Of the remaining point source discharges, a 0% reduction was required by the TMDL. LDEQ's position is that when oxygen demanding substances are controlled and limited in order to ensure that the dissolved oxygen criterion is supported, nutrients are also controlled and limited. Therefore, effluent limitations for BOD<sub>5</sub> will be included in the permit.

# Final Effluent Limits:

# **OUTFALL 001**

Final effluent limits shall become effective on the effective date of the permit and expire on the expiration date of the permit.

Effluent Characteristic	Monthly Avg. (lbs./day)	Monthly Avg.	Weekly Avg.	Basis
BOD₅ ·	13	10 mg/l	15 mg/l	Limits are set in accordance with the Statewide Sanitary Effluent Limitations Policy (SSELP) for facilities of this treatment type and size and the Bayou Grosse Tete Watershed TMDL for Biochemical Oxygen Demanding Substances and Nutrients, July, 2007.
TSS	19	15 mg/l	23 mg/J	Since there are no numeric water quality criterion for TSS, and in accordance with the current Water Quality Management Plan, the TSS effluent limitations shall be based on a case-by-case evaluation of the treatment technology being utilized at a facility. Therefore, a Technology Based Limit has been established through Best Professional Judgement for the type of treatment technology utilized at this facility.
TDS  Concentration limits are		200 mg/l		EPA TMDL for Fecal Coliform Bacteria, Chloride, Sulfates, TDS, Sedimentation, TSS and Turbidity for Selected Subsegments in the Terrebonne Basin, April, 2007.

Concentration limits are used in accordance with LAC 33:1X.2709.F.1.b which states that mass limitations are not necessary when applicable standards and limitations are expressed in other units of measurements.

#### Other Effluent Limitations:

### 1) Fecal Coliform

The discharge from this facility is into a water body which has a designated use of Primary Contact Recreation. According to LAC 33:IX.1113.C.5.a, the fecal coliform standards for this water body are 200/100 ml and 400/100 ml. Therefore, the limits of 200/100 ml (Monthly Average) and 400/100 ml (Weekly Average) are proposed as Fecal Coliform limits in the permit. These limits are being proposed through Best Professional Judgment in order to ensure that the water body standards are not exceeded, and due to the fact that existing facilities have demonstrated an ability to comply with these limitations using present available technology.

#### 2) pH

According to LAC 33:LX.3705.A.1., POTW's must treat to at least secondary levels. Therefore, in accordance with LAC 33:IX.5905.C., the pH shall not be less than 6.0 standard units nor greater than 9.0 standard units at any time.

#### 3) Solids and Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts in accordance with LAC 33:IX.1113.B.7.

#### IX. ENFORCEMENT AND SURVEILLANCE ACTIONS:

#### A) Inspections

A review of EDMS indicates that there were no inspections performed for this facility:

### B) Compliance and/or Administrative Orders

A review of EDMS revealed that there are no recent enforcement actions administered against this facility.

#### C) DMR Review

Since this is a proposed facility there are no DMRs for this facility.

# XI. <u>ADDITIONAL INFORMATION:</u>

Final effluent loadings (i.e. lbs/day) have been established based upon the permit limit concentrations and the design capacity of 0.155 MGD.

Effluent loadings are calculated using the following example:

BOD: 8.34 gal/lb x 0.155 MGD x 10 mg/l = 13 lb/day

At present, the Monitoring Requirements, Sample Types, and Frequency of Sampling as shown in the permit are standard for facilities of flows between 0.1 and 0.5 MGD.

Effluent Characteristics	Monitoring Requirements		
•	<u>Measurement</u>	Sample	
, Th	<u>Frequency</u>	Type	
Flow	Continuous	Recorder	
BOD <sub>5</sub>	2/month	Grab	
Total Suspended Solids	2/month	Grab	
Total Dissolved Solids	2/month	Grab	
Fecal Coliform Bacteria	2/month	Grab	
pH .	2/month	Grab	

# **Pretreatment Requirements**

Based upon consultation with LDEQ pretreatment personnel, it is recommended that LDEQ Option 1 Pretreatment Language be included in LPDES Permit LA0124851. This language is established for municipalities that do not have either an approved or required Pretreatment program. This recommendation is in accordance with 40 CFR Part 403 regulations, the General Pretreatment Regulations for Existing and New Sources of Pollution contained in LAC Title 33, Part IX, Chapter 61 and the Best Professional Judgement (BPJ) of the reviewer.

# XII. <u>TENTATIVE DETERMINATION:</u>

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharge described in this Statement of Basis.

#### XIII. <u>REFERENCES</u>:

Louisiana Water Quality Management Plan, Vol. 10, "Wasteload Allocations and Discharger Inventory", Louisiana Department of Environmental Quality, 1992.

Louisiana Water Quality Management Plan, Vol. 5-B, "Water Quality Inventory", Louisiana Department of Environmental Quality, 1998.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 11 - "Louisiana Surface Water Quality Standards", Louisiana Department of Environmental Quality, 1999.

Louisiana Administrative Code, Title 33 - Environmental Quality, Part IX - Water Quality Regulations, Chapter 23 - "The LPDES Program", Louisiana Department of Environmental Quality, 1999.

Low-Flow Characteristics of Louisiana Streams, Water Resources Technical Report No. 22, United States Department of the Interior, Geological Survey, 1980.

<u>Index to Surface Water Data in Louisiana</u>, Water Resources Basic Records Report No. 17, United States Department of the Interior, Geological Survey, 1989.

<u>LPDES Permit Application to Discharge Wastewater</u>, Town of Livonia, Livonia Wastewater Treatment Facility, September 28, 2009.

# PART III STANDARD CONDITIONS FOR LPDES PERMITS

#### SECTION A. GENERAL CONDITIONS

#### 1. Introduction

In accordance with the provisions of LAC 33:IX.2701, et seq., this permit incorporates either expressly or by reference ALL conditions and requirements applicable to Louisiana Pollutant Discharge Elimination System Permits (LPDES) set forth in the Louisiana Environmental Quality Act (LEQA), as amended, as well as ALL applicable regulations.

#### 2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and the Louisiana Environmental Quality Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

#### 3. Penalties for Violation of Permit Conditions

- a. LA. R. S. 30:2025 provides for civil penalties for violations of these regulations and the Louisiana Environmental Quality Act. LA. R. S. 30:2076.2 provides for criminal penalties for violation of any provisions of the LPDES or any order or any permit condition or limitation issued under or implementing any provisions of the LPDES program. (See Section E. Penalties for Violation of Permit Conditions for additional details).
- Any person may be assessed an administrative penalty by the State Administrative Authority under LA.
   R. S. 30:2025 for violating a permit condition or limitation implementing any of the requirements of the LPDES program in a permit issued under the regulations or the Louisiana Environmental Quality Act.

#### 4. Toxic Pollutants

- a. Other effluent limitations and standards under Sections 301, 302, 303, 307, 318, and 405 of the Clean Water Act. If any applicable toxic effluent standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is promulgated under Section 307(a) of the Clean Water Act for a toxic pollutant and that standard or prohibition is more stringent than any limitation on the pollutant in this permit, the state administrative authority shall institute proceedings under these regulations to modify or revoke and reissue the permit to conform to the toxic effluent standard or prohibition.
- b. The permittee shall comply with effluent standards or prohibitions established under Section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under Section 405(d) of the Clean Water Act within the time provided in the regulations that establish these standards or prohibitions, or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

#### 5. Duty to Reapply

a. Individual Permits. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit. The new application shall be submitted at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the state administrative authority. (The state administrative authority shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) Continuation of expiring permits shall be governed by regulations promulgated at LAC 33:IX.2321 and any subsequent amendments.